A COMPARISON OF PERSONALITY CHARACTERISTICS OF VOLUNTEERS AND NONVOLUNTEERS FOR HYPNOSIS EXPERIMENTS

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Problem

Recent reports [2, 3, 9, 10] indicate concern about the possibility of sampling bias when volunteer subjects are used in psychological investigations. Although studies involving hypnosis are almost totally dependent on the use of volunteer subjects, there is only one report [7] dealing with the personality characteristics of the volunteer and nonvolunteer for hypnosis experiments.

It is difficult to generalize or compare findings of the earlier studies because of inter-study differences in incentives, differences in the personality measurements that were made, etc. Also, it has been demonstrated that important differences emerge depending on whether volunteers are defined as those who merely say that they will attend the experimental session or those who actually appear for the experimental session [5]. Most of the investigations of the volunteer for psychological experiments, as well as the single report on volunteers for hypnosis, have defined volunteering as a statement that the individual would appear, without a subsequent check to see if in fact the "volunteer" did appear for the experiment. The more restricted definition of volunteers (i.e., those who appear for the subsequent experimental session) will be used in this investigation.

Procedure

The following psychological tests were administered in two group testing sessions to 76 sophomore student nurses (mean and median age = 19 years): Guilford-Zimmerman Temperament Survey, Edwards Personal Preference Schedule, IPAT Anxiety Scale, Allport-Vernon-Lindzey Study of Values, and Group Rorschach.[1] Following the first testing session the students were asked to volunteer for an investigation involving hypnosis. Although they were told the amount to be paid to volunteers, and the time involved, details of the experiment were not given. Slips of paper were distributed on which each student wrote her name and whether or not she wished to volunteer. She was told also that every effort would be made to schedule the appointments of volunteers at a convenient time and that even after scheduling, a change in appointment time would be arranged if the student would call. Failure to keep the appointment without having called to give prior notice would mean exclusion from the investigation.

By this method, 54 students indicated a desire to participate. Within a month after the call for volunteers, the students were notified by mail of their appointment times. These appointments were assigned on the basis of the students' free time. Five to seven days before her appointment, each student was contacted by mail to reconfirm her appointment. The note again indicated that the student should call, if necessary, to arrange a more convenient appointment.

Sixteen students failed to appear for scheduled appointments and also failed to call for rescheduling of appointments. On logical as well as empirical grounds [5], the test results of these 16 Ss were included with the Nonvolunteer group, making a Volunteer group of 38 and a Nonvolunteer group of 38.

Results and Discussion

The significant t test comparisons of the two groups on the five psychological tests are presented in Table 1. Significant differences between the two groups were

[1]We wish to thank Harry Brittain and George Petoe for rating the Rorschach protocols, and Douglas Thornton and Harry Brittain for assistance with the statistical analysis.

TABLE 1. SIGNIFICANT *t* TEST COMPARISONS BETWEEN VOLUNTEERS AND NONVOLUNTEERS

Test	Group			N†
	Volunteers Mean	Nonvolunteers Mean	*t*	Vols./Nonvols
Guilford-Zimmerman:				38/38
Factor 0	15.18	18.45	2.86*	
Factor F	15.97	18.39	2.24	
Factor P	17.89	19.97	2.09	
Rorschach Dependency Ratio**	25.99	21.31	2.17	38/36
Allport-Vernon-Lindzey Social	40.79	44.43	3.02	36/35
Edwards Personal Preference Schedule				38/38
n Order	9.97	12.24	2.36	
n Exhibition	14.92	12.97	2.49	
n Aggression	10.16	8.24	2.00	

*Significant at the .01 level. All other *t*'s are significant at the .05 level.

**Defined as the ratio of the sum of dependency content divided by the S's total number of responses.

†N's varied on some of the tests because of incomplete protocols.

found on four of the five tests: Guilford-Zimmerman Temperament Survey, Rorschach Dependency Ratio, Allport-Vernon-Lindzey Study of Values, and the Edwards Personal Preference Schedule. No significant differences were found on the IPAT Anxiety Scale. Volunteers for hypnosis differ from nonvolunteers on eight of the 37 variables.

Volunteers are more dependent as measured on a projective index of dependency, but not on objective scales thought to comprise aspects of the dependency construct. They have higher needs for exhibition and aggression, are less objective, and lower in friendliness, personal relations, and need for order. They are lower also in the social value area. There would be a possibility of bias in hypnosis investigations in which these variables are important.

The Rorschach dependency ratio seems likely to measure a more general and basic interpersonal attitude than the Abasement, Deference, or Succorance scales of the EPPS. This suggests that corrollaries of unconscious dependency might be a fruitful area to investigate [6].

The popular description of the hypnotic situation usually emphasizes the undivided attention given to the subject by the hypnotist. It is not surprising, therefore, that volunteers show higher exhibition needs. This explanation seems to be supported by the fact that volunteers seem to be less socially oriented, i.e., lower in friendliness, personal relations, and social value. Again, the suggestion is that volunteers for hypnosis might be seeking an intense dependent relationship in the hypnotic situation.

Some investigators have shown concern about the psychological adjustment of the volunteer. Depending upon the conditions of the particular investigation, volunteers have been found to be higher in self-esteem and not different in feelings of security [8], not different in general anxiety level [2], lower in general anxiety level [10], and more psychologically maladjusted [1, 4]. The results of this study show no difference in general anxiety level for the volunteers. There is a tendency for volunteers to be lower in emotional stability, but the difference is not significant.

These findings should be limited to the group of subjects employed in this investigation until comparable data are available for others. There is, for example, the possibility of a culturally conditioned sex difference involved in volunteering for seemingly hazardous or unusual experiments [3, 7].

SUMMARY

A battery of psychological tests was administered to a sophomore class of student nurses, N = 76, and a call for volunteers for an investigation involving

hypnosis was made. Scores of actual participant volunteers, N = 38, and nonvolunteers (including those who had volunteered but failed to appear for their appointments), N = 38, were contrasted. The following significant differences were found: Volunteers were higher on the Rorschach Content Dependency Ratio, *n* Exhibition, and *n* Aggression. Nonvolunteers were significantly higher in Objectivity, Friendliness, Personal Relations, *n* Order, and in the social value area.

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A STUDY OF SUGGESTIBILITY IN CHRONIC SCHIZOPHRENIC HOSPITALIZED PATIENTS*

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This study investigated differences on suggestibility tests between two comparable groups of chronic schizophrenic male patients. One group consisted of patients who obtained privilege cards on the basis of psychiatric staffing and were able to abide by the regulations. The second group consisted of patients who either were not deemed psychiatrically ready to receive a privilege card or else were not able to abide by the regulations governing the privilege card and therefore had to return the card.

Additional areas investigated included the nature of the distribution of scores on the Hull postural (body) sway test. Eysenck[2] described the postural (body) sway distribution curve as apparently U-shaped. Heilizer[4] reported results with a group of 62 female volunteer subjects which seem to agree with Eysenck's assumptions. Hull[5] reported that the distribution on the postural sway test was essentially bell-shaped or normal in form. Bartlett[1] found in an investigation of 155 paranoid schizophrenic patients that the distribution on the postural sway test followed the bell-shaped or normal curve. Finally, an attempt was made to determine the hypnotizability of the group of patients who gave the highest and the lowest scores on the postural sway test.

*Appreciation is due Nicholas Lagakos for his aid in collecting the data.